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FACSIMILE TRANSMITTAL FORM	Application Number	10/790898
	Confirmation Number	
	Filing Date	March 1, 2004
	First Named Inventor	Williams, Todd R.
	Examiner Name	Catherine A. Simone
Fax: 571-273-8300	Attorney Docket Number	56523US009
Total Number of Pages in This Submission: 10 (including cover)		
Date: July 12, 2006	Attorney for Applicant: Stephen W. Buckingham	

ENCLOSURES (check all that apply)		
☐ Fee Transmittal Form ☐ Issue Fee Transmittal ☐ Amendment Transmittal	☐ Petition	☒ Appeal Communication to Board of Appeals and Interferences
☐ Amendment/Reply ☐ After Final ☐ Affidavits/Declaration(s)	☐ Petition to Convert a Provisional Application	☐ Appeal Communication to Technology Center (Appeal Notice, Brief, Reply Brief)
☐ Extension of Time Request	☐ Power of Attorney, Revocation	☐ Proprietary Information
☐ Express Abandonment Request	☐ Change of Correspondence Address	☐ Status Letter
☐ Information Disclosure Statement	☐ Terminal Disclaimer	☐ Other Enclosures:
☐ Response to Missing Parts/ Incomplete Application ☐ Response to Missing Parts under 37 CFR § 1.52 or 1.53 ☐ Response to Missing Parts under 35 USC 371 in US Designated/ Elected Office (DO/EO/US)	☐ Request for Refund ☐ Request for Continued Examination (RCE) Transmittal	
☐ Drawings	☐ After Allowance Communication to Technology Center	

REMARKS:

Thank you.

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Patent
Case No.: 56523US009

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor:	WILLIAMS, TODD R.	
Application No.:	10/790898	Confirmation No.:
Filed:	March 1, 2004	
Title:	DIMENSIONALLY STABLE COMPOSITE ARTICLE	

BRIEF ON APPEAL

Mail Stop: Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING OR TRANSMISSION [37 CFR § 1.8(a)]
I hereby certify that this correspondence is being:
☐ deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.
☒ transmitted by facsimile on the date shown below to the United States Patent and Trademark Office at 571-273-8300.

July 12, 2006 — Date
M Schroeder — Signed by: Madonna Schroeder

Dear Sir:

This is an appeal from the Office Action mailed on February 13, 2006, in light of the Advisory Action mailed May 19, 2006, finally rejecting claims.

☐ Please charge the fee provided in 37 CFR § 41.20(b)(2) to Deposit Account No. 13-3723. One copy of this sheet marked duplicate is also enclosed.

☐ Any required fee will be paid at the time of EFS-Web submission.

☒ If necessary, charge any required fee, or credit any overpayment to Deposit Account No. 13-3723.

A Notice of Appeal in this application was faxed on May 12, 2006, and was received in the USPTO on May 12, 2006 .

Appellants request the opportunity for a personal appearance before the Board of Appeals to argue the issues of this appeal. The fee for the personal appearance will be timely paid upon receipt of the Examiner's Answer.

REAL PARTY IN INTEREST

The real parties in interest are 3M Company (formerly known as Minnesota Mining and Manufacturing Company) of St. Paul, Minnesota and its affiliate 3M Innovative Properties Company of St. Paul, Minnesota.

RELATED APPEALS AND INTERFERENCES

The application on appeal is a divisional of United States patent application 09/871,421, now United States patent 6,858,253. Appellants are unaware of any related appeals or interferences.

STATUS OF CLAIMS

Claims 1 through 26 are pending. Claims 1 through 26 stand rejected.

STATUS OF AMENDMENTS

No amendments have been filed after the final rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

The claims at issue concern composite articles having large scale predictable dimensional stability (p. 8, lines 1 through 4; p. 12 line 24 through p. 13 line 17). The structures include a metal foil (p. 9 line 9 through p. 10 line 17; p. 14 lines 13 through 18; p. 16 line 7; Fig. 1 ref. num. 10; Fig. 2 ref. num. 33; Figure 3; Fig. 3 ref. num. 67). The composite article also includes a layer of a radiation cured polymer (p. 12 lines 12 through 23; p. 13 lines 18 through 27; page 14 lines 18 through 26; Fig. 1 ref. num. 14; Fig. 2 ref. num. 36). The layer of a radiation cured polymer has a front surface bearing a three dimensional microstructure of precisely shaped and located functional discontinuities (p. 7 lines 24 through 28; p. 11 line 16 through page 12 line 4; p. 15 line 17 through p. 16 line 2). In some embodiments the functional discontinuities are interactive (p. 7 lines 29 through 31).

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

First Ground of Rejection

Claims 1 through 11 and 13 through 22 stand rejected under 35 USC § 102(b) as purportedly anticipated by any one of U.S. Patents No. 5,468,540 ("Lu").

Second Ground of Rejection

Claims 12 and 23 through 26 stand rejected under 35 USC § 103(a) as purportedly unpatentable over the teachings of the Lu patent.

ARGUMENT

The Examiner has asserted that the Lu patent teaches all limitations of claims 1 through 11 and 13 through 22 and that the only things included in claims 12 and 23 through 26 that Lu does not teach would be obvious to one of ordinary skill in the art. While not conceding that the remaining limitations of the claims are either met or obvious, the Examiner's rejection is clearly wrong since there is nothing in Lu to suggest the limitation that article have "long scale predictable dimensional stability." The Examiner has asserted that the Lu patent teaches this property, but has not cited anything in Lu to suggest it.

The appellants have pointed out that lines 1 through 4 of page 8 of the specification specifically state that "The term 'long term predictable dimensional stability' refers to the ability of a segment of a shaped sheet-like substrate to retain substantially its predicted dimensions after being heated to a heated environment of 150°C of less for 60 minutes or less and then returned to room temperature." Since the Lu patent only teaches polyvinyl chloride which has a glass transition temperature of about 78°C, it certainly does not meet this limitation. In response to the argument that this term, as defined, was not taught by the Lu patent, the Examiner stated that those features "are not recited by the rejected claim(s)." The applicants argued that because the specification provides a specific definition of this phrase, it is effectively recited in the claims. The Examiner rejected this position in the Advisory Action.

Contrary to the Examiner's position, a patent applicant is clearly permitted to define a term and then use the term to have the defined meaning in the claims. The Manual of Patent Examining Procedure states that "This means that words of the claim must be given their

plain meaning **unless applicant has provided a clear definition in the specification.**" MPEP §2111.01 [emphasis added] If the Examiner is attempting to assert the "plain meaning" of the claim terms, then she needs to articulate what that meaning is and how it is taught by the Lu patent. She has not done so. However, that would not be correct in this instance since the appellants have provided a clear definition in the specification. This position is further supported by the MPEP when it states, "When the specification states the meaning that a term in the claim is intended to have, the claim is examined using that meaning." MPEP §2173.05(a) To the extent that the Examiner cites cases where the applicant was not permitted to read limitations from the specification into the claim, it is not because those applicants were not permitted to define a term in the specification, but because they did not clearly indicate the intention to provide such definitions.

Because the Lu reference does not teach or suggest that the items have long term predictable dimensional stability as required by all of the presently pending claims, those claims are clearly not anticipated by the Lu patent. Because the Lu patent does not provide anything to suggest or lead one of ordinary skill in the art to the conclusion that it is desirable for the articles to have such stability, they are also not obvious. Clearly, the invention, as defined by the presently pending claims, is patentable.

CONCLUSION

For the foregoing reasons, the Examiner has erred in rejecting this application. The appellants respectfully request that the Board of Patent Appeals and Interferences reverse the Examiner on all counts.

Respectfully submitted,

July 12, 2006
Date

By: _____
Stephen W. Buckingham, Reg. No.: 30,035
Telephone No.: 651-733-3379

Office of Intellectual Property Counsel
3M Innovative Properties Company
Facsimile No.: 651-736-3833

CLAIMS APPENDIX

1. A composite article having large scale predictable dimensional stability comprising:

   a. a metal foil backing having a back surface and an opposite front surface; and

   b. a layer of a radiation cured polymer having an exposed front surface bearing a three-dimensional microstructure of precisely shaped and located functional discontinuities including distal surface portions and adjacent depressed surface portions and an opposite surface in adherent contact with the front surface of said backing.

2. The composite article of claim 1 wherein said metal foil backing comprises a metal selected from the group consisting of copper, aluminum, zinc, titanium, tin, iron, nickel, gold, silver, combinations thereof and alloys thereof.

3. The composite article of claim 1 wherein said radiation cured polymer is a cured oligomeric resin.

4. The composite article of claim 1 wherein said radiation cured polymer is cured by electron beam radiation and said metal foil backing is e-beam radiation transmissive.

5. The composite article of claim 1 wherein said radiation cured polymer is cured by actinic radiation.

6. The composite article of claim 1 wherein said radiation cured polymer is cured by thermal radiation.

7. The composite article of claim 1 wherein the depressed areas are wells which are shaped for receiving and holding complementarily shaped articles.

8. The composite article of claim 7 in which the cavities are shaped to receive gyricon spheres.

9. The composite article of claim 2 wherein the metal foil comprises a metal selected from the group consisting of copper and aluminum.

10. The composite article of claim 7 in which the cavities are shaped to receive conductive spheroids.

11. A composite article having large scale predictable dimensional stability comprising:

a. a metal foil backing having a back surface and an opposite front surface; and

b. a layer of a radiation cured polymer having an exposed front surface bearing a three-dimensional microstructure of precisely shaped and located interactive functional discontinuities including distal surface portions and adjacent depressed surface portions and an opposite surface in adherent contact with the front surface of said backing.

12. The composite article of claim 11 wherein at least one portion of the polymer layer includes a distal surface portion distally spaced at least 0.05 mm from an adjacent depressed surface portion.

13. The composite article of claim 11 wherein said metal foil backing comprises a metal selected from the group consisting of copper, aluminum, zinc, titanium, tin, iron, nickel, gold, silver, combinations thereof and alloys thereof.

14. The composite article of claim 11 wherein said radiation cured polymer is a cured oligomeric resin.

15. The composite article of claim 11 wherein said radiation cured polymer is cured by electron beam radiation and said metal foil backing is e-beam radiation transmissive.

16. The composite article of claim 11 wherein said radiation cured polymer is cured by actinic radiation.

17. The composite article of claim 11 wherein said radiation cured polymer is cured by thermal radiation.

18. The composite article of claim 11 wherein the depressed areas are cavities which are shaped for receiving and holding complementarily shaped articles.

19. The composite article of claim 18 in which the cavities are shaped to receive gyricon spheres.

20. The composite article of claim 13 wherein the metal foil comprises a metal selected from the group consisting of copper and aluminum.

21. The composite article of claim 18 in which the cavities are shaped to receive conductive spheroids.

22. The composite article of claim 18 wherein the microstructure is shaped to provide an article which is useful as an etch mask.

23. The composite article of claim 1 having a dimensional change of less than about 100 ppm.

24. The composite article of claim 1 having a dimensional change of less than about 60 ppm.

25. The composite article of claim 11 having a dimensional change of less than about 100 ppm.

26. The composite article of claim 11 having a dimensional change of less than about 60 ppm.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.